REMARKS/ARGUMENTS

Initially, Applicants would like to thank Examiner Zhu for the courteous telephonic interview conducted January 24, 2012, the substance of which is reflected in the claim amendments above and remarks below.

Claim 1 has been amended to require the alloy to have microstructural stability after exposure at 1200°C for 100 hours, support for which exists, *inter alia*, at page 16, lines 30-33; page 17, lines 1-20; page 18, lines 6-39; and page 19, lines 1-9.

Claim 3 has been cancelled.

New claims 23 and 24 have been added, requiring little, if any, tungsten and/or molybdenum to be present, support for which exists at page 4, lines 31-35 of the present application.

Claims 1, 4, 6, 7 and 10-24 are currently pending, although claims 11-16 have been withdrawn from consideration. Upon indication of allowable subject matter, Applicants currently intend to seek rejoinder of withdrawn claims as appropriate.

The Office Action rejected claim 3 under 35 U.S.C. § 112, fourth paragraph, as failing to further limit claim 1. Applicants respectfully submit that cancellation of claim 3 has rendered this rejection moot, and that the rejection should be reconsidered and withdrawn.

The Office Action also rejected claims 1, 3, 4, 6, 7, 10 and 17-22 under 35 U.S.C. § 103 as obvious over JP 52-105526 ("JP 526"). In view of the following comments, Applicants respectfully request reconsideration and withdrawal of this rejection.

The invention alloys have high-temperature mechanical strength, allowing work at high temperatures such as 1200°C or higher. As explained in the present application, this high-temperature mechanical strength results at least in part from the fact that the

microstructure of the invention alloys is stable at high temperatures -- the microstructural stability of the invention alloys at high temperatures allows the alloys to be used in high temperature applications, including applications at 1200°C or higher. The body of the claims require microstructural stability at a specified temperature and, thus, are directed to alloys having high-temperature mechanical strength.

The asserted art, JP 526, neither teaches nor suggests the invention high-temperature mechanical strength alloys having the required microstructural stability. Rather, JP 526 is merely cumulative of other alloys which have been demonstrated to differ from the invention alloys. For example, the composition of WO 99/16919 (page 2, line 21 et seq. of the present application) appears to be similar to that of Alloy A (table 2) described in JP 526. As explained at the top of page 3 of the present application, such prior art compositions have operating temperatures around 1080°C, temperatures which are much lower than the 1200°C (or higher) at which the invention allows can be worked. In fact, JP 526 subjects its compositions to temperatures of 816°C and 900°C (see, Tables 7 and 8 of the JP 526 translation provided concurrently herewith[1]). Nowhere does JP 526 teach or suggest compositions having microstructural stability at the high temperatures contemplated by the present invention.

JP 526 does nothing more than provide very broad concentration ranges for a number of elements, many of which are optional (0% being the bottom of the range for most of the elements). From the disclosed list of potential elements (Cr, Ni, W, Mo, Zr, B, Fe, Ti, Al, Nb, Ta, Y), only chromium is identified as being critical. Such broad guidance cannot

[1] Applicants submit herewith a translation of JP 526 so that its failure to teach or suggest the claimed invention is made clear.

possibly lead one of ordinary skill in the art to the narrow compositional requirements resulting in the required high-temperature mechanical strength alloy of the present invention.

Indeed, JP 526 does not exemplify any compositions containing titanium, let alone titanium in the required amount of 0.5-5%. As demonstrated in the March 2010 Rule 132 declaration submitted in this case, a significant difference exists between alloys containing 0.4% titanium (well within the 0-2% range in JP 526) and 0.5% titanium as required by the claims. This showing of unexpected benefits and properties, by itself, should be sufficient to overcome the pending obviousness rejection.

Nothing in JP 526 would lead one of ordinary skill in the art to the narrow compositional requirements of the present invention and the required microstructural stability *without undue experimentation* -- JP 526 is not concerned with, and thus cannot lead to, the required alloys having the required high-temperature strength properties.

During the Interview, the Examiner wondered whether support for the amendment to claim 1 exists in the present specification and whether the claim amendments were sufficiently definite. First, as indicated above, examples (containing titanium) discuss microstructural stability at 1200°C for 100 hours (see, for example, page18, lines 23-27). Accordingly, clear support exists in the present application. Second, the phrase "microstructural stability" is discussed in several places in the application and, as such, is provided with clear and definite meaning (see, (1) page 18, lines 32-37, describing the microstructure -- carbides distributed in a dense network and fine secondary carbides precipitated in the matrix -- "This microstructure was not affected by exposure to high temperature (100 h at 1200°C)..."; (2) microstructural stability includes carbides remaining thus distributed to provide reinforcing strength at these temperatures -- see, page 16, line 30

through page 17, line 1). Accordingly, Applicants believe that the Examiner's concerns have been addressed.

In view of the above, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103.

Applicants believe that the present application is in condition for allowance. Prompt and favorable consideration is earnestly solicited.

Respectfully submitted,

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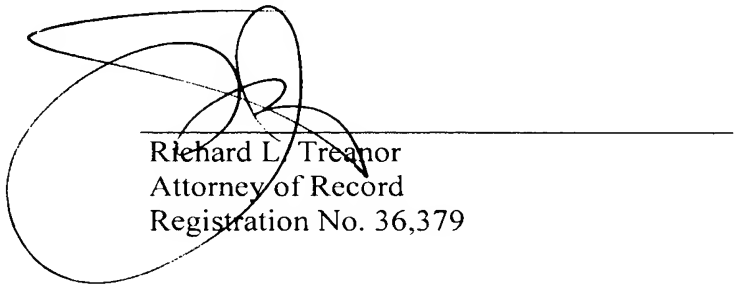

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